

Plu
Compendium Obstetricii:

OR, A

SMALL TRACT

ON THE

Formation of the FOETUS,

AND THE

PRACTICE of MIDWIFRY.

By *N.* **TORRIANO, M. D.**

*Non celata est vis mea tibi, ex quo factus sum in
abdito, artificiosè confectus, velut in imis parti-
bus terræ.*

*Massam meam vident oculi tui, & in libro tuo hæc
omnia scripta sunt; ex quibus diebus formabantur,
quum nondum ullum ex eis exstaret.*

Psalm cxxxix. Ver. 15, 16.

L O N D O N:

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Compendium of the

OR A

SMALL TREATISE

ON THE

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PRACTICE OF MIDWIFERY.

J. MORRISON, M.D.

My friend, I have the honor to acknowledge the receipt of your letter of the 10th inst. and in reply to inform you that the same has been forwarded to the proper authorities for their consideration. I am, Sir, very respectfully,
Your obedient servant,
J. MORRISON, M.D.

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A SMALL

TRACT

ON THE

Formation of the FOETUS, &c.

HAD MAN continued in that *Innocence* in which he was created, and had he not yielded to the Abuse of his *permitted LIBERTY*; how glorious would his Life have been upon Earth, when wanted Food need not have been procured by tedious Labours, and when no Tillage was necessary to the plentiful Productions of the then fertile Earth.

But alas! that blessed Age lasted not long, when *Purity* of Life, and *Integrity* of Heart, were sufficient Barriers to Man from Fear and Punishment. Short was the Time, when he was *absolutely* ignorant

of what *Pain* and *Diseases* were, when a sound Mind was the constant Inhabitant of as sound a Body.

For soon, too soon, was there an Alteration made in both, and then how changed was Man, and still how changed remains from what he was. Now is he driven from his delightful Habitation, and instead of perfect and enduring Health, is rendered liable to every ill-fabled to be included in *Pandora's Box*: *Death* now creeps on apace, and enters into every Part of Nature: Nor is there now for Man any Pleasure or Procurement whatsoever without Labour to be had: Now, to a short-enduring *Spring*, succeed the Heats of *Summer*, the Uncertainties of *Autumn*, and the Chills of *Winter*; and every diversified Season brings on its *Group* of Disorders, every Climate has its *endemic* or peculiar Diseases.

The Formation of Man seems to be the joyful work of Nature, whilst its Destruction, by Disease, resembles the Pleasure of a cruel Step-mother: For scarcely does he draw his Breath, but he meets with a thousand Things to molest and trouble him, and every succeeding Age is liable to their Increase; whilst every Season, every Kingdom,

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Kingd.m., every Part of our *Frame* is subject to numberless Diseases.

Adeo verum est, totum esse Hominem à Naturâ Morbun.

But there seems yet to WOMEN, (*the designed Preservers* of our Species) a strange Inequality of destined Disorders, and a thousand Diseases peculiar to their Frame and Constitution, and that too in consequence of their becoming Mothers¹; besides all those to which they are equally liable as Men are: Nor is their laborious Task less, whilst we are obliged to them for their tender Care of the infantile Age; a Labour this! to which few of us would quietly submit: For where's the Man who would patiently lead the weak and tottering Infant, and by the slow Degrees of its Progression, form to himself the pleasing Hopes the tender Mother does of its Perfection, for which no Thanks are a sufficient Recompence.

But this is not all; for Experience shews us, and Holy Writ confirms it, that (without detracting from ourselves) they are endued with many *peculiar* Excellencies of

¹ Postquam gravida est foemina, plurimis afficitur malis ex solâ gravidatate oriundis. *Boerh. Aph.* 1293.

their own. They *vie* with Men in many of the *Arts* and *Sciences*, and exceed them in the *Sofiness*, the *Sweetness*, and *Spirit* of their Conversation; whilst they are moulded as it were for Love, and for renewing the continually-decaying State of Man.

Tho' the first Fountain of our Misery was a *Woman*, yet how greatly have her Descendants atoned for it, by those most bitter Punishments, to which they are subjected from their peculiar Frame.

For all the Parts designed by Nature, *ad Menstruationem, Conceptum, Graviditatem, Partum, Puerperium, Lactantionem*, subject them to many Disorders, to which Men cannot be liable: To them *Inceptio Menstruationis* is often very painful, nor less so in its Retreat: For as HIPPOCRATES^{*} observes, there is not one in a Thousand, that has not at that Time an attending or symptomatic Fever; and when at any Time they are seized with any common Disorder, to which Men are also liable, how does the Intervention of some of their

* *Menstruis abundantibus Morbi eveniunt, & subsistentibus accidunt ab utero Morbi. Hip. Aph. Lib. v. N^o. 57. Idem, Lib. v. N^o. 30. ait, Mulierem utero gerentem Morbo quopiam acuto corripi lethali.*

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peculiar Diseases militate against them, and make them more likely to succumb.

Seeing this then, we are led by *Gratitude*, as well as the common Considerations of *Humanity*, to study for their Help and Assistance, and amongst their other various Diseases, to reflect on those which accompany their Deliveries, and are not the least considerable.

And as there is no Part of Nature more ordinarily liable to decay than Mankind are, so there is no Work more useful than to consider of and investigate those Disorders to which we are obnoxious, not less whilst in the dark Mansions of the Mother's Womb, than when we are exposed to Light, as also those to which she is no less liable, during the Time of uterine Gestation, and the actual Scene of Child-birth, in order to be able to give Assistance to both.

As the CREATION in general is an *ample Field*, a Field too *vast* and *copious* for our Penetration, too *deep* an *Ocean* for us to fathom, too *great* a *Height* for us to *soar* up to; so in the *whole* of NATURE'S Works, there is none exceeds that Branch of it, the Formation of Man: In order therefore to the doing all in my Power, to shew my Sense of this great Work of God, I have chosen that for the Subject of my present

8 *A small Tract on the*

little Tract; wherein, (as the whole Subject in all its Parts has been very learnedly and ingeniously treated by many Authors in different Languages, but lately in our own by that great Practitioner Dr. SMELLIE) I shall only give such an Idea of my Thoughts hereupon, as shall easily come within the Compass of this small Work; and shall run into no prolix Disquisition, any further than is absolutely necessary to discover my Sentiment of the Subject on which I treat. In order to which, I shall first recite the *Progress* of Nature herein, in the *Sperm*, the *menstrual Blood*, the *Womb*, and the Contents thereof, which contribute to the Formation of the Child; as the *Funis*, the *Placenta*, with its *Amnion* and *Chorion*, and *Allantoides*; the *Waters* contained in them, their Exclusion and consequent Purgation called *Lochia*, the Flux of the *Milk*; the *Meconium* of the Child, the Causes of Abortion, both *internal* and *external*, in the different Times of uterine Gestation, and lastly the Causes of Labour itself; hoping my Errors will be candidly overlooked, and my weak and impotent Endeavours generously accepted of.

I shall purposely wave any particular Description of the *Partes Generationis*, because

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cause I would omit every Thing that might convey the least Thought of Indecency.

Fas est in occulto facere, quod nefas est palam dicere.

And first, we seem in our Natures to be partly *Vegetable*, and partly *Animal*; created, as we are informed, of the Dust of the Earth, which, by Change of Position, and the different Modification of Matter, seems to be the Cause, (or to us the apparent Cause) why we are in such a particular Frame; for I believe that *Monsters* only come by some Pressure, occasioned by Frights of the *Mother*, whereby the Parts of the Child are by that Pressure differently situated, and whilst in that *soft State*, in consequence differently modified, and unequally proportioned, for want of an equable Circulation; since, I conceive, a *monstrous* Production never occurs, after once the *Ossification* is perfected. Now as to the Origin of the *Sperm*, it seems to be an *Illimination* of the finest Parts of all the corporeal Secretions, which by Nature is concocted, and by particular Vessels absorbed and retained, in order to be so commixed by the different Sexes, as thereby to produce an *Animal* of the same constituent

constituent Parts as the Parent: And in this Male Sperm, I apprehend there is every distinct Part of the human Frame accurately delineated, or existing rather, as in the Seed of a Plant, which may be discerned by microscopic Observation, as I have been informed, tho' I do not know it by Experience; and this *Sperm* being placed in the Matrix of the Female, and receiving from her a proper Nidus, Ovum, or Sacculus (which descends into the Womb from the Ovaria by the reversed *peristaltic* Motion of the Fallopian Tubes, and is taken up by the *Fimbriae* or *Fringes* thereof called *Morsus Diaboli*.) is then thereby nourished, and by Degrees becomes capable of receiving that *animating* Spirit, to which it owes its Motion. Hence also it appears, that till this Vivification happens, (which may be sometimes sooner, and sometimes later, as the Child or Mother's Strength are, for some Women quicken sooner than others) it is a Vegetable; and then afterwards, when its Motions may be called its own, by a kind of Command (not *à ratione*) of the animal Spirits, which seem to be the Source of Motion, it then becomes an Animal, and stands in Need of more Nourishment, which, how it receives, is the next Part of

of my Consideration. Some Authors alledge, that there are small Papillæ or Teats in the Womb, which the Child sucks: but that I apprehend cannot be, by reason of the Intervention of the Membrane, through which they must have been inserted; whereas they (especially the *Amnion*) are found excessive smooth, and to have no Apertures at all.

Others again suppose, this Nourishment to have been *entirely* from the Liquors of the *Amnion*, and some *only* from the circulated Blood through the *Placenta* and *funis umbilicalis*, going from the Mother and Child.

EPICURUS and DEMOCRITUS, as PLUTARCH tells us, were of this Opinion. *Vide Plut. de Placitis Philosophor. Lib. 5. C. 16.* This same Author, in the same Chapter, mentions the *Stoics* being of the Opinion, of its nourishing only by the *Funis*. Of the same Opinion also was ANDREAS LAURENTIUS, & FABRICIUS *ab Aquapendente*.

Others again alledge, and with seemingly the best Reason, that it is partly from one, and partly from the other, which seems supported pretty well by Facts: For if, on the one hand, by any Accident, a Pressure is made on the *Funis*, so as *entirely*

tirely to stop the Circulation, the Child generally (I may say always) dies, unless it happen only for a Moment, in Time of Delivery; and the Liquor of the *Amnios* (as it will boil into a tolerable Consistency) seems on the other hand, as if it was designed nutritiously by Nature to assist the Child, either by Suction or Absorption.

But there may be another Reason for the Thickness of these Waters, *viz.* that they may bear the Weight of the Child better, than if they were more limpid; in the same manner as Sea-water will bear a greater Pressure than fresh Water will, and Water which is salted will bear an Egg, which would sink to the Bottom in Water entirely fresh.

Again, if there is a Circumvolution of the String round the Neck or Body; or if, as it sometimes happens (tho' not often) that the Child's Motion ties a *Knot* in the *Funis*, so as that the Circulation is somewhat impeded, tho' not entirely lost; for if it is, it dies, as in the other Case; here perhaps the Liquor *Amnii* may help such Deficiency, and the Child may be preserved; tho' it has not that plentiful Flow of Blood through the umbilical Chord, as if there were no Obstruction. This twofold Nourishment is supposed by HIPPOCRATES and
HARVEY

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HARVEY in *Acetabul. Uteri*, one of whom calls it *Materia Nutricatus*.

These Liquors are by some supposed excrementitious (from the Child) which if they were, would increase as the Child increased, whilst there was no Evacuation for them, which is plain they do not, but rather lessen, the nearer the Woman is to Parturition.

The Opinion of the funical Nourishment is also defensible from another Circumstance, *viz.* that in case of only a partial Separation of the *Placenta* from the Womb, a Flooding ensues, and the Child is starved, unless it can be stopt by Rest, by Opiates, Bleeding, or Astringents³.

Hence I think, we may reasonably conjecture, that as the Liquor of the *Amnios* will not of itself alone preserve the Child's Life, in case of such a Separation of the *Placenta* from the Womb, its chief Nourishment is most probable to be from the Mother, by means of the *Placenta* and *Funis umbilicalis*, tho' perhaps not all.

Nature seems to inform us herein also, by the Stopping of the *Catamenia* or menstrual *Flux*, immediately after Conception;

³ Remedia, quies animi, corporisque, aër frigidus modicè, venæ sectio, adstringentia, opiata. BOERH.
Apb. 1307.

because

because that then, that Blood, which by reason of a *Pletthora* (in Women especially of a sedentary Life, and a lax Habit) is evacuated monthly, becomes now retained, and by reason of the Child's being nourished by it, is not found burdensome, but only in the first Months of Pregnancy (at which Time the Child is too small to receive it all) and then that Uneasiness is immediately relieved by * V. S.

The various Opinions about *Conception*, are all rather dubious than certain; nor can we, I believe, fix any certain Data for it, which will be free from the deserved Imputation of Conjecture. The most likely seem to be, that the Male produces the Child, and the Female the containing Ovum, which by the inverting *peristaltic* Motion of the *Fallopian Tube*, is pressed into the *Ejaculatories* of the Matrix, (greatly distensible tho' immensely small) from the *Ovaria*, by contracting its *Fimbriae* or *Fingers* in such a manner, as to receive it from the *Ovaria*, which are included in

* Quorum. (malorum) Nonnulla oriuntur ex sanguine menstruo secerni impedito ob clausum uterum. Et fortu tamen non potente hactenus in sui incrementum eum absumere. BOERH. *Aph.* 1294.

Quae proinde pendentia ab una causa eodem remedio sanguinis missione, tolli solent. *Ibid.* 1297.

the *Ligamenta lata*, which Expression of them may in salacious Women happen oftener than there is a proper Inhabitant for it; in which Case it then passes away (unimpregnated) along with the other Discharges of the Womb.

Whether the *Funis Umbilicalis* and *Placenta* proceed from the Child, or from the *Ovum*, I know not, but believe from the latter; however, they are very soon joined together after *Conception*, and to the Womb immediately after the Consumption of the thinnest Part of the Male Semen, which as (if I mistake not) *Boerhaave* with others supposes, is for some Days the Increase of the *Animalcula*, and we see, that as soon as this Union is found, the *Pletbora* is lessened, even so as not always to require a critical Evacuation by Bleeding, tho' it is sometimes necessary, lest by too great a Fulness of the Vessels, a Pressure comes upon the *Placenta*, which may cause a partial Separation, and is generally one Cause of *Abortion*, if it will not reunite soon, tho' it sometimes happens that Wo-

Inter periculosissimos vero gravidarum morbos habetur fluor uterini sanguinis. BOERH. *Apb.* 1303.

Qui fere & eo, quod placenta ab utero soluta & arteriis plenis sanguine distendente, uteroque distento, sæpe pleno rivo arteriosus cruor emanet. *Ibid.* 1304.

men

men ⁶ will have a Discharge of Blood for many Months, and yet be very well, and go out their Times, but then they are generally very strong Women; and this Discharge is not from the *Fundus uteri*, but from the vaginal Vessels.

The Womb is situated below the *Vesica-Urinaria*, and above the *Rectum* or strait Gut, and joined to both, which by the Increase of the Child's Magnitude, and consequent Extension and Pressure of the Womb on those Parts, often causes Obstructions of Urine, and a costive Habit of Body: Its Form *unimpregnated*, is in the Shape of a *Pear* or *Cucurbit*, or a *Florence Flask* flattened; as it gradually increases, it becomes above the Neck ablately Spheroidal in its Shape: In further Months of Pregnancy, it becomes more circular and orbic, its Neck shortening by Degrees, till at last it becomes almost entirely *Spherical*; at which Time, by the Weight of its Contents, it lodges itself on the *Ossa Iliæ*, or Wings of the *Pelvis*, as on a resting Place; and the Increase of its Bulk causes it to press upon the Intestines,

⁶ *Vide* DAVENTER, who mentions one who had her *Menses* all the Time of uterine Gestation, and another who never had them, but when pregnant. See also ASTRUC's *Diseases of Women*.

Liver,

Liver, Lungs, and Diaphragma, so as to cause Shortness of Breath, Vomiting, &c. The Neck before Pregnancy is of a considerable Length, with a kind of Slit, which, as is observed, resembles the Mouth of a Tench Fish, and therefore is called *Os Tince*; though MAURICEAU compares it to the Mouth of a young Puppy. By Degrees, as the Waters and Child increase, the Length of the Neck is lessened, till at last, in the ninth Month of uterine Gestation, it becomes quite pulpy, soft, and very thin. The Womb is entirely smooth in its inward Surface, (tho' including many Vessels between its outward and inward Surfaces) except in the *Vagina*, in which, (in Women who have not had Labours, or many Children) there are *Rugæ* or *Plicæ* to be found, like the *Palate* of an Ox.

I can't help here making one Remark on the Opinion delivered by our great Schoolmaster HIPPOCRATES, who says, that the Female *Uterus* is divided (as it were) into *Cells*, the Right for Boys, the Left for Girls, and the Middlemost for *Hermaphrodites*. This Mistake must have arisen from the Ancients not having had an Opportunity of dissecting the human Body in his Time: Nor had they any other Method of Delivery, in *preternatural* Cases,

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but

Take the Water in which Flesh has been washed.

but that of *Instruments*: They never turned Children; but where they did not use the CÆSAREAN OPERATION, their only Resource was to *Knives, Extractors, Specula Matricis, &c.* so that by this Means they had not all the Methods of Information, which the *Practitioners* of later Ages have had, tho' even the CÆSAREAN OPERATION itself might have convinced him, or examining the *Secundines* after Extraction.

Some Authors alledge, that the Womb grows thinner⁷, others that it grows thicker in uterine Gestation, as it extends⁸. But the best Opinion (I humbly conceive) is, that it remains always of the same Thickness, which, if true, must be from the Abundance of Blood or other Humours with which it is supplied by the *Iliac* or *Hypogastric Arteries* and *Veins* filling the *Vessels* of the *Uterus* (which are innumerable and of all Directions, *Longitudinal, Spiral, Conical, and Traverse*, or rather like a Ball of Thread) in order to assist its Contraction after Delivery, in Proportion as it is dilated and increased in Bulk: And after Delivery, as these Humours evacuate, it reassumes its former Size and

⁷ MAURICEAU & FABRICIUS, p. 97. fol. edit. cap. IX.

⁸ DAVENTER'S,

Situation, without any Diminution or Increase of its natural Thickness, and the Neck also resumes its former Length and Rigidity in time, tho' never quite so much as in a Virgin State.

The *Lochia* which flow after Child-birth, at their first Discharge, are very florid, and in a large Quantity, and then lessen in both those Respects, and become at last ferous and discoloured *, and are more or less plentiful, as the Women are laborious or sedentary, or of a lax or firm State of Solids. The Waters contained in the Womb (which seem to be a lymphatic Exusion through the Vessels, that pass through the *Placenta*, and terminate in the Membranes) are also different in different Women, are larger in Quantity, in Proportion to the Distance from *Parturition*, and if boild will coagulate, which seems to offer to us a Conjecture, that they are nutritious, and may be taken in by the Mouth of the Child, as Part of its Food. And hence (as I before observed) may serve as a Reason, in case of a small Separation of the *Placenta*, why the Child is not entirely deprived of Food, till proper Medicines restore the Adhesion.

The *Funis* contains two Arteries and one Vein, though some think the contrary,

B 2

* Like the Waters in which Flesh has been washed.

trary, (*viz.* two Veins and one Artery) and has *Nodes* or *Glands* in it, which perhaps may secrete or prove Receptacles for some Humours, which would be prejudicial. There is an *idle* Opinion, formed in regard to the Number of these *Nodes*, and also their *Colour*, but both very unworthy Notice.

The *Chorion* is the outward thickish Membrane, to which closely adheres the *Amnion*, or, as some call it, the *Charta Virginea*, and with which the *Fetus* in the Womb is more immediately covered; it is very transparent, has no Blood-vessels, and is whiter and thinner than the *Chorion*, tho' this Opinion (in regard to the Blood-vessels) I can hardly deliver as a Certainty, because in a Case I once saw (where I had a pretty good Opportunity to examine) there seemed to be insculcating Vessels between the *Chorion* and *Amnion*; and yet, (as I have endeavoured to separate them after Delivery) I never could observe this, nor could I ever find the *Allantoides*. The Reason of this Appearance of the Blood-vessels must be that the Subject died in Child-bed, or some other sudden Way; so that the Womb, and all its Contents, were entirely whole, and the Child in it at the full Time, which gave the Opportunity

* Like the Waters in which Fetus has been washed.

tunity of seeing these Inosculations, which cannot be when the *Secundines* are excluded by Delivery, because in such Case the Vessels of the *Chorian* and *Amnios* (immensely small) are soon emptied, and then cannot be discerned, or at least not so easily, as when rendered turgid by Contents.

As to the *Allantois*, it never was existing in the human Species ⁹ to Appearance; for if it did exist, it would naturally be of a Consistency and Strength sufficient to contain and bear the Pungency of the Urine, for which Purpose it is alleged to be designed by those who maintain its Existence; and if it was of such a Consistency, it would necessarily be apparent to the Sight: Nor is there (in my Opinion) any more Reason why a Child should urinate *in Utero*, than that it should exclude *in Utero* the *Fæces Alvine*, which it never does, as BOERHAAVE asserts (and most subscribe to his Opinion herein) whilst alive in the Womb, unless sometimes in Labour, where the Breech presents (tho' not often) by the strong and violent Contraction of the *Uterus*, which is superior in its Force to the Resistance of the *Sphincter Ani* of the Child, tho' this Exclusion

⁹ HEISTFR, in *French*. CHESLDEN'S *Anatomy*.

often gives room to suspect the Child is dead. In this Observation on the *Allantois*, I am supported by HEISTER and others, who deny its Existence.

The Exclusion of the Waters happens differently; sometimes the Membranes are so thick; that (when full of Waters) they are protruded beyond the *Os Externum*, and by their own Force (as I myself have found in Deliveries) open the Passage of the *Vagina*, sufficiently to give Way for the Exclusion of the *Fetus*; at other Times they break, and the Waters come off dripping by Degrees, and after giving a kind of *BULGE* cease, till new Labour Pains come on, and give them a *second* Evacuation, which *second* Evacuation some have supposed to be from the including *Allantoides*, and to have been urinous, which I apprehend to be a wrong Conjecture; because, I suppose, they only stop at first by the Child's filling up the Cavity of the Brim of the *Pelvis* between the Pains; and that on the Return of them, by a second and more forcible Contraction of the Womb, the Waters exsude again, and so on, till all are evacuated; which I am the more led to think, by reason of a large Quantity of coagulated Blood, which (where there has been a latent Flooding, which was

was not perceptible but by the Pulse) has been found to follow after this Discharge, and which would not have been coagulated, had it had free Passage during Labour. Sometimes the Waters and Membranes will come out, and hang like a Bag between the Legs, and be so strong and firm, as to receive almost all the Waters and yet not break; and in such Case the Womb is left dry and empty of them, in the same manner, as if they had run off by breaking too soon; and Labours in such Circumstances are generally laborious.

What I mean by a latent or inapparent Flooding, is that Flooding which does not appear outwardly, by reason that the Largeness of the Child stops its Evacuation; and yet (in this Case, as the *Placenta* must be either in part or in whole separated from the Womb, the Woman may languish, and generally or frequently dies under the Midwife's Hands, immediately after (and sometimes before) the Extraction of the *Fetus*.

Another Reason to support my Conjecture in regard to the *Waters* is, that in case the *Membranes* break, the Waters all run off, if the Child is situated in any *preternatural* Position, the Womb becomes dry, and the labour very laborious, both to the

Woman and to the *Accoucheur*, who in such Case will find it very difficult to turn the Child, by reason of the great Contraction of the Womb; especially if the Waters have been long off, and no Flooding to help in their room, which is a Help, tho' one not much to be wished for.

A third Confirmation I would offer is, that as the proportionate Weight of the Child to the Waters is as 12 to 13, so it is pretty easy in a wrong Situation, where the Waters are not broke, to introduce the Hand, by pricking the Membranes, and stopping the Waters by the Arm, and by that Means the Child will be pretty easily moved and returned, so as to bring it by the Feet, where the *Pelvis* is tolerably large or sizeable.

This leads me to give some Account of the *Pelvis*, which is greatly wider in Women than in Men, as may be seen by cadaverous Inspection. It consists of several Bones: Part of the lower *Vertebrae* of the Back-bone or *Spine* makes the back Part, to which the *Os Sacrum* is immediately joined underneath, and to that is annexed below the *Os Coccygis*, which consists of three or four Joints, which are rather cartilaginous than bony.

On the Sides it contains at its upper Part the *Ossa Iliæ*, and at its lower the *Ischia*,

Ischia, and in the Front the *Os Pubis*; which tho' in Children these are divided, yet in Puberty they are so joined as to form but one, (as it were) which is called the *Os Innominatum*, which is connected together by several Ligaments. In a well formed and undistorted *Pelvis*, the Width thereof at the upper Part of the Brim is from Side to Side $5\frac{1}{4}$ Inches, from Back to Front $4\frac{1}{4}$ Inches, from the Top to the Bottom it is 6 Inches: When the *Coccyx* is pressed back, it is then $5\frac{1}{4}$ from Back to Front, and $4\frac{1}{4}$ from Side to Side at the Bottom part, or an Inch less when it is not. The Depth at the *Ischium* is four Inches, and at the *Pubes* 2 Inches deep. The inward Curvature of the *Coccyx* is for supporting the Child in some Measure. Now the Necessity of this Formation (as Mr. Gould of Dublin has very ingeniously observed) is in order to give the easier Exclusion to the *Foetus* in Birth; for the Child when it first presses into the *Pelvis*, its *Forehead* is toward one of the *Ossa Iliæ*, and the *Occiput* or *Hind-head* to the opposite one; and as the Labour goes on, it (being uneasy) strives to turn itself, so as that the *Forehead* may be towards the *Os Sacrum*, and the *Occiput* towards the *Os Pubis*, whereby the broad Part of the Head is

is by this means turned to the broad Part of the *Pelvis*, and the narrow to the narrow Part thereof, which is a good Direction for the Use of the *Forceps* in Deliveries.

The Womb is situated in the Middle of this *Pelvis* or *Basin*, and when unimpregnated, is in a right Line from the *Navel* to the *Pudendum*; but in uterine Gestation, by reason of the Extension of the *Belly*, is in the Midway between *that* and the *Scrobiculum cordis*.

The Causes of Abortion are either *internal* or *external*: The internal Causes may happen either from a Disease in, or Death of the Child. That cannot be always known: It may be consequential from some acute Disease happening to the Mother, while with Child. The external Causes are many, such as a *Fall*, a *Blow*, Over-reaching, Hard-working, or from Passions of the Mind, a Fright, Over-joy, sudden News, Grief, and Fretting. In all these Cases, a Miscarriage ensues from a Separation of the *Placenta*, in consequence of its causing a Flooding, which Flooding, if not timely prevented by Bleeding, Rest, Opiates, or astringent Medicines, causes the Death of the Child.

It

It is very remarkable, how very slight a Thing will cause Abortion in some Women, and how much on the other hand some will bear, and yet go through; nay, and that, the same Woman, at different Times. I knew one who miscarried by a little Slap on the Face (from her Husband) and another by lifting a Parcel of Cloaths; and two others, who though they had several bad Falls went on well.

Some Authors alledge, that the Womb has a contracting circular *Muscle* at its *Fundus*, which is the Occasion of the Exclusion of the *Placenta*; which (though a pretty Supposition) is not always true, because we find the *Placenta* not always at the Bottom of the *Uterus*, but sometimes on one Side, sometimes on the other, and sometimes over the *Os Internum* itself; And therefore there appears as much Reason for this contracting *Muscle* at one Part, as at the other.

Nor indeed does it need any peculiar and particular *Muscle*, by reason of its numberless Vessels, which are circular, conical, and traverse, and seems to have all these Directions to help its Contraction after Labour, whereby it drains out all those Humours, &c. which are disagreeable to it.

This

This is proved also from its close Contact with the Child, when all the Waters are evacuated, which is like a Glove to all the Parts of it, and consequently takes great Force in dilating it in dry Labours.

The *Placenta* is ofteneft about 6¹ Inches Diameter; but I have measured one myself which was 9¹, and the *Funis* 27 Inches. The further from Parturition, the more the Water, and so *vice versa*. I believe the Child of this Labour (which was laborious) must have weighed 14 lb.

Innumerable are the Vessels, which insinuate from the Loos of the *Placenta* with the Womb, which is very happy; for was it supplied with only one Vessel in case of a Separation there must ensue a Miscarriage; whereas now, many of these Vessels may be loosened, and yet they may by Care be so reunited, as to prevent it.

The Child is observed to be of the following different Weights, at different Times, by MAURICEAU in his *Apborisms**, which I can't confirm by my own Knowledge, not having had sufficient Opportunities, and shall therefore set them down as he mentions them in Order. — 11 to 12 lb. Weight at 9 Months, (but this I am sure is a very small Computation;) — 7 to 8

* French Edition, large 4to.

at 8 Months; — about 4 at 7 Months;
— 3 Ounces at 3 Months; — 2 a Drachm
at 1 Month; — and 2 Grain at 10 Days.

— From whence we may judge, that the
first Day of Conception, it cannot weigh
more, or be bigger than a Millet Seed.

The Flux of the Milk happens imme-
diately upon, or very soon after Delivery,
in some sooner, and in some later, and in-
creases till the third or fourth Day, upon
which the *Lochia* lessen, and generally a
little Fever ensues; and as the Milk takes
its Return by the lateral Vessels, the Flux
of the *Lochia* (by Means of the Veins and
Arteries, which correspond with the Breast
and Womb) returns and increases, and the
Milk then becomes cleansed, and fit for
the Child's Food, and is very necessary to
help to cleanse it from its various Hu-
mours, which it had imbibed in the
Womb. It is remarkable, that as the
Breasts dilate, the Womb contracts, and
so *vice versa*.

I had once a Patient whose Milk, dur-
ing the whole Month, was almost of a
pale Lemon Colour; the Child sucked and
received no Harm: She continued a little
feverish and hysterical during the Time
this Colour remained. I could no Way
account for so odd an Appearance, unless

it could proceed from some very small Parts of the *Secundines*, or some congealed Blood being left behind, which became congealed by her taking a slight Cold, because she would be delivered out of Bed, and of which the full Exclusion was not effected till ten or twelve Days. But then, as this Accident often happens, I should think, was that the Cause, there would often be such an Appearance of Milk too.

This Person once, when she was suckling, had her milk stopt suddenly, and it flowed again plentifully on her taking a gentle cathartic.

A little before Delivery, while there is a moral Certainty of its proving the Labour, the *Breasts* grow flaccid, and the Womb *turgid*, after Labour the reverse.

So also with Virgins, as they approach toward the Time of excluding the *Menses*, their Breasts swell, and grow flaccid as soon as they are discharged. They have also at this Time a sort of (tho' not properly called) Milk.

The Causes of Labour seem to be by the *Contraction* of the *Abdominal-Muscles*, and the *Parietes* of the *Belly* pressing upon the *Uterus* full of Waters; the Symptoms of which (if genuine Pains) are from the Back and Belly downwards to the *Pubes*,
returning

returning and going off by Fits, every Interval being shorter than the preceding, which gives room for a tolerable Gueſs, when the Labour will be over.

This Contraction of the Belly preſſes down the Waters in their Membranes, and helps to open the *Os Uteri*, which is the whole Cauſe of the Excluſion of a dead *Fœtus* (which cannot help itſelf) unleſs manual Operation is neceſſary; but in a live one, there is alſo its own uneaſy Senſation, from its Fulneſs of Humours within, and preſſure of the Belly upon it, which makes it ſuffer, and cauſes it to ſtir violently, and preſs forward toward the *Os Uteri*; which forcing out, the Waters and Humours lubricate the Mouth of the Womb and *Vagina* in a natural Birth, ſo as to diſtend it, and make the Birth eaſy.

In preternatural Caſes, the Woman has ſometimes no Pains at all, and ſhe muſt be helped by Art, i. e. *Manu educendâ unguibus præciſis* ¹⁰.

The *Mæconium* in the Child is a kind of ſæculent Matter ſticking to its Inteſtines,

¹⁰ It is very happy in a wrong Situation, when the Child muſt be turned, that the Woman has no Pain; for, that, in ſo many odd Poſitions, might endanger the Life of the Child, and make the Labour alſo very troubleſome to the *Accoucheur*.

and

and can never be discharged till the Child has breathed, which (unless as in the Case above-mentioned) it never does. A Proof of a Child's not breathing in the Womb may be taken hence, that if the Child dies in the Womb before Help can be had (as may in some preternatural Cases happen) the Lungs will sink in Water; but if it dies in but a few Moments after Delivery) it having received Air into its Lungs by Inspiration) no Weight will make the Lungs sink, nor will any thing but the Air-pump empty them from that inspired Air whilst *in Utero*. Nor are all the Blood-vessels so permeable before as after Birth; so that the Circulation after Birth is more extensive.

The menstrual Blood comes from a *Plethora*, and generally happens at Puberty, when the Woman is arrived at full Growth, so as not to require so much of the Humours for her Increase in Bulk: Then are the Overplus of these Humours determined towards the *Uterus* and Breasts (as being the most yielding and soft Parts) and by the Communication there is between the Breasts and *Uterus*, we find, that just before the menstrual Flux the Breasts are turgid, and immediately after collapse and grow flaccid: So upon the
first

first Discharge of the *Lochia*, while the Womb by Labour is dilated, the Blood is more plentifully exuded thence, and as it contracts, the Breasts again grow more turgid, and a large Quantity of Milk is received into them, and the lower Discharges lose both their Colour, Quantity, and Viscidity by Degrees.

I shall now say something as to the Practice of Delivery.

And here it will be necessary to see what are the Requisites on the *Accoucheur's* Part, and what on Nature's Part.

1st, The *Accoucheur* should have *Mens sana in corpore sano*.

2d, He should be of a modest Mind, a tender Disposition, careful and thoughtful, and yet not want Ideas.

3d, He should be tolerably well versed in the Mechanism of the human Frame in general, but especially in the Anatomy of the *Parts* of the Woman, that he may act mechanically in this mechanic Operation: For, as I apprehend, neither in Midwifry or Physic will any one act upon certain Grounds, who does not consider how mechanically the human Body is formed.

4th, He should be humane and patient, by gentle Expressions giving Comfort to his Patient under her Pains, and yet be

deaf to her Cries, where he is obliged to increase them.

5th, He should be somewhat versed in medical Knowledge, but especially should he be acquainted with the Investigation of those Disorders, which it is his immediate Business (*pro re nata*) to give Help to, such as Floodings, Faintings, Convulsions, After-pains, &c.

6th, He should be rather generous than rapacious, and as near as possible make it a Rule to go to the first, who sends in the same Day, whether poor or rich, unless previously bespoke, and under Promise, as is frequently the Case.

7th, He should attend his Patients as often as he can in the Month of their Lying-in, by which he will comfort them, and gain Experience himself, in regard to those Accidents which unawares turn them off the Stage.

8th, It would be no Harm, if he were able to give proper Directions for the making the Patient's Bed, as it may sometimes happen, that People (especially out of Town) in their first Children, and through want of Friends about them, may be at a Loss.

On the Part of Nature.

Nature will often do alone, tho' Help is most generally requisite in difficult Births, and other Circumstances, such as these that follow, and which I set down as aphoristic Monitions.

Where the Womb is oblique.—Endeavour by the Fingers to place it right.

If to the right.—*Fundus* will be to the left, and so *vice versa*.

Pendulous.—Lay Women on their Backs, and apply a Cloth like a Belt.

If resupine.—Deliver her standing.

Feet presenting.—Extract by them, and mind to turn the Face to the *Sacrum* by the Feet, as soon as the Child is born, as far as the *Hips*.

Shoulder right.—Push back with the right Hand, and extract with the left.

Ditto left.—Reverse.

Face (the worst.)—Pass up to the *Fundus* and bring down the Feet, and so make the Head go up; in this Case a *FILLET* is necessary.

Buttocks with Feet to the Pubes.—Put a Finger or blunt Hook in Groin, and pull as far

as the Knee-pan, and then pull out gently first one Foot, then the other, and then pull the Child down to the Haunches, and turn its Face to the *Sacrum*, pressing a little upwards as you turn.

If Buttocks present Feet downwards — Pull by the Groin as before, and then pull the Legs out very gently, pressing them at the same Time into the Hollow of the *Ossa Ischia*; towards the *Perinaeum*.

If Child lies across. — Turn it by pushing the Head back, and get one or both Feet as you can, and when it is extracted to the Head, introduce your left Hand Fingers to the Child's Mouth, and your right Hand Fingers about its Neck, and give it a half-round Turn upwards, which renders it easy, and there is not the Danger of rearing the *Perinaeum*, as if you pull strait forwards.

Posture of the Child. — It is no Matter how a Child lies; if it don't lie right, only observe this, that the lower the Head the harder to turn, and *vice versa*.

Navel String presenting. — Push it back, lest by Cold the Blood stagnates, Circulation stops, and the Child dies. This will not answer but where the Waters are broke, for where they are not it can't happen.

Hand-

Hand presenting. — Must sometimes be cut or wrung off; but that is only when it is swelled greatly by injudicious handling; sometimes it will recede by pushing the Child back.

String round the Child's Legs and Body. — Introduce your Hand, and clear it off the Legs, and then proceed.

Hand and Legs at once presenting. — Give Reason to think of Twins, or that the single *Fœtus* is in a Posture, as if it was going to pick up something, or rather in a Tumbler's Posture.

Flooding. — Shews a Separation, entire or partial of the *Placenta*.

After-pains. — Shew some Pieces of the *Placenta* left, or coagulated Blood; (of no great Consequence;) which are excluded by the Womb's Contraction, — if assisted with some proper Remedies, such as Opium for Instance, or this Powder. R. Pul. Croc. Myr. Elef. Pul. Cinnam. ana gr. v. m. f. Pulv. pro re natâ sumend. They are a kind of *Tenesmus Uteri*.

Children born covered with a Cream-like Mucus. — Shew some Reason to suspect the *Liquor Amnii* nutritious, or to support HIPPOCRATES or HEISTER's Notion of

the *Lac Uteri*. Yet as some have been born with no apparent Mouth, and yet alive, to these the Liquor *Amni* could not be nutritious, unless merely by Absorption thro' the Pores of the Skin.

Fetus.—From 1 Foot to 3 Feet long, half an Ell most generally.

Scapula presenting with the Back of the Head on the Pubes.—A hard Case this! and must be delivered by the *Vest* with a *Fillet*, and pull down with one Hand, while you push up with the other.

Face presenting.—If left long brings on an *Echymosis*, the Pressure causing an Extravasation into the Lymphatics.

Touching.—Best when the Body is emptyest, and by the Fore-finger, or what the French call the *Doigt Indice*.

Vagina.—Wears smooth by Labours, tho' rugous at first.

Womb.—Has Nerves from the *Plexus* of the Stomach. Ergo the sympathetic Sickness.

Its large Vessels.—Will dilate to admit a Finger, yet when contracted hardly visible;

Its Substance is somewhat glandr-similar.

Fetus.—Have been found in the fallopian Tubes, the Ovaria, and Intestines.

Waters.

Formation of the Foetus. 39

Waters.—More as younger with Child, and *vice versa*.

Placenta.—Larger as younger with Child, in Proportion to the Child, and *vice versa*.

Womb, its Nerves at the Mouth.—Give much Pain in touching at full Time.

Delivery near.—Brings on a kind of *Tenesmus Uteri*, determines the Waters to the *Os Uteri*, and opens it gradually.

Twins.—Have two Membranes and two *Placenta's*, between which there is sometimes a mutual Circulation; so that by an Injection thrown into one, the Vessels of the other will fill.

Women.—Sometimes miscarry of one Child, and go on with another.

Mola's and false Conceptions.—Are only coagulated Blood, which, by Pressure, becomes like a Lump of solid Flesh.

Fleshy Substances.—From a cancerous Humour very dangerous.

Vomitings.—If moderate, good; too much cause Flooding by shaking; Bleeding is the best Remedy.

Contraria.—*Contrarius medentur*.

Pendulous.—Dutch, and laborious Persons, most liable by their Employ.

Miscarriage. — Generally 15 Days after the Death of the Child.

Flooding. — Must deliver immediately, or both die.

Women. — Miscarry oftner at 3 Months, than any other Time.

Sudden Delivery. — Have some one to press gently the Belly; lest by so sudden an Emptying from so great Fulness, sudden *Lypothimia's* come on, which may carry them off.

In Labour. — If cold, apply Bladders to the Feet with warm Water.

First Children. — Keep frequently stretching the *Os Internum*.

Head coming down quick. — Keep the Hand against the *Perineum* lest it tear, and mind to lubricate the Parts; if once torn, it runs on to the *Fundament*.

Uterus. — Rent mortal.

Company. — Very bad, disturbs the Head, causes Watching, and brings on Fevers.

Urine obstructed. — Caused by Pressure of the Child and *Uterus* on the *Urethra Vesicae*, helped by *Calbeter*.

Suckling. — Those who do not, should have *Lochia* longer; none but strong Women

Formation of the Fœtus. 44

men should suckle, it generally hurts the weak ones, and does not give good Nourishment to the Child.

Obstructions. — Worse than too much *Lochia*.

Lurking Fever. — Shews Obstruction in some Part of the Substance of the Uterus.

Sore Breasts. — Cured by *Spt. Vin. Camp.* by Plaisters, such as the *Emplas. e Cicuta cum Ammoniac.* or *Quincy's Emplast. Mam-millare.* Sometimes warm Cloaths, or a dress'd Hare-skin will answer all the Purposes.

Hard Labour comes — From narrow *Pelvis.* Weak Women. Large Child. Rigidity of the Parts.

Crotchet Forceps, or any other Instrument. — ~~Never to be used but in the utmost~~ Danger.

Child. — If you cannot save both, the Preference should be given to the Mother; but this must be left to the Judgment and Mind of the Practitioner; as well as it must to act in Conformity with, or contrary to this Theory; for I freely own, were it not for that excellent Method of Teaching which is exhibited by Dr. SMELLIE's Midwifry (as to the operative Part) would want

want great Light, in Comparison to what it does, when his instructive Method is regularly pursued.

If right Hand presents.—Use the right Hand, and so *è contra*.

After-pains.—Come from the cicatrizing of the Vessels, and so there is less Fluency, and that is the Reason why they are less with the first Child than others.

Looseness, &c.—First 5 or 7 Days mortal. *Girl.*

Weak Women. Large Child. Rigidity of the Parts.

Hard Labour comes.—From narrow Pelvis.

Never to be used but in the utmost Danger.

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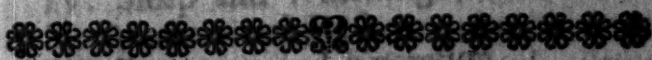
Traēctatus de Naturā Non-Naturalium :

OR, A

TREATISE

On the NATURE of the

NON-NATURALS.



And they are so called, because they do not directly and directly belong to the Constitution of the Body: but

1st, As

A small tract on the
nature of light, in comparison to what
is usually said of it, and its influence on the
human mind.



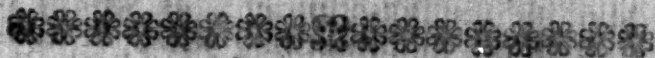
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OR
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TREATISE

On the NATURE of the

NON-NATURAL.



the moderate or immoderate Use of them.

TREATISE

On the Nature of
The NON-NATURALS.

*Læta quies operi succedat membra madenti,
His, cibus, somnus, ordine & alma VENUS.*

OF these there are Six, viz.
I. The Passions of the Mind.
II. Air.
III. Meat and Drink.
IV. Sleep and Watching.
V. Motion and Rest.
VI. Retention and Excretion.
And they are so called, because they do not simply and directly belong to the Essence and Constitution of the Body; but yet, either,
1st, As

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1st, As they are absolutely necessary to
 in Preservation or Duration; or
 2dly, As they may become beneficial or
 hurtful, i. e. natural or against Nature, by
 the moderate or immoderate Use of them.

A

I. By the Passions of the Mind are meant
 those Commotions and false Conclusions
 that are excited in it upon the Percep-
 tion of various Ideas and Objects, and
 at the same Time affect the Body.

These *Pathemata* or Affections become
 hurtful, either, *first*, when they exceed
 their Bounds by too hasty and unseason-
 able Conclusions about those confused Ap-
 pearances and Fancies, which the Memory
 and other Occasions suggest, without duly
 inquiring into, and considering all, or the
 most rational Circumstances; or, *secondly*,
 when they are weighed and valued *precipi-
 tately*; and by mere sensual Impulses, ra-
 ther than due moral Reflections; and re-
 gards which may answer the best Ends.

To Disorders of this kind, *Children* of
 both Sexes, and other grown Persons of
 weak Apprehensions, are most subject,
 from a too great Fondness for their bodily
 Ease, and for want of having their Rea-
 son and Senses exercised, by useful Prin-
 ciples and necessary Discipline, in order to
 a true

a true and ready Discernment, of what is Good, and what is Evil.

But those that have addicted themselves to a circumspect Reflection, have patiently and considerately collated, and with Calmness and Composure concluded, of Things in their Intention to perform, and have fortified their Minds against all Emergencies, may prevent many Disorders, moral and physical, both in their Minds and in their Bodies.

Our Passions were given us by our Creator for our good, and well-governed Passions are greatly beneficial to the Preservation of our Health, especially that Joy, which attends the Accomplishment of, and Encouragement given to some laudable Enterprize, after taking due Pains in bringing it to bear.

The Good and Hurt caused by Passions of any sort, is ever more intense and quick, than that proceeding from any other natural or external Causes: Witness various kinds of Fits, and Instances of Persons that have been relieved or prejudiced in their Health, cured or killed, by great and sudden Fears, Joys, &c. and that, more or less, according to the Prevalence of Custom, which here bears considerable Sway, as well as the four Cardinal Temperaments,

peraments, viz. Hot or Cold, Moist or Dry, and their Compounds.

A due Skill in all of these much Helps, and is of great Service to solve many Difficulties, and to form a right Judgment of Things, e. g. Some when moved immediately turn red, and are vociferous in expressing their Resentments (an Indication of endeavouring to remove a Hurt that Instant;) others pale, and sullenly morose (a *sure* CRITERION of Revenge, and future Spite :) These outward Marks depend, in a great Measure, on their different Constitutions; and arise from the Mixture of their Blood, and the Texture of its Vessels; which, being closer wove, the Blood on a sudden, or a violent Commotion, is pressed towards the Centre, by the Contraction and the Closing of their rigid Fibres, apter to break than yield: But in sanguine and laxer Temperaments, such a Pressure makes the Blood ooze through the yielding Coats of the Veins to their Surfaces, like Mercury squeezed through Shammy, which will hardly pass a closer Leather without breaking it. In short, the Passions must neither be entirely stifled nor suppressed, lest a Sluggishness, and an irregular disorderly Circulation should ensue; nor must they be too much
excited,

excited, lest their Violence and Continuance should extremely disturb the Brain, Spirits, Nerves and Muscles, and create and cherish numberless Distempers; but a due Medium ought to be endeavoured after, since Hope, Desire, and Alacrity, are found to be great Promoters of Health; and Health itself is in short nothing more or less, than the proper Action and Reaction of the Solids and Fluids upon each other Reciprocally. But raging Passions of Lust, or Spite stifled, hurt the Body most. Wherefore PRINCIPIIS OBSTA. MEAD'S *Præcept.* p. 19.

II. AIR is necessary to the Preservation of the Bodies of Men, and other Animals, chiefly in these two Regards, viz. Respiration, and pressing upon their Surfaces.

Respiration is performed by the Lungs, and the *Aspera Arteria*, with its Ramifications peculiarly in them for that End, terminating in minute Vesicles, which are dilated by Inspiration of the Air, and flattened when that Air expires, whereby (or by which Action of the Lungs) the Blood is broke into smaller Globules, and intimately mixed and heated in its Vessels lying underneath them.

D

Some,

Some, in their Calculations, make the Pressure of the Air, upon the whole internal Surfaces of the Vesicles and Branches of the *Aspera Arteria*, far to exceed 10,000 lb. in Weight, arising from the vast Extent of those Surfaces, on which the Blood is spread in the capillary Vessels, to receive the Force of the Air upon each Globule, immediately to make it fit for Circulation. *An admirable Fabrick indeed!*

The Pressure varies with the Gravity of the Air to 1-10th more or less, upon the greatest Rise or Fall of the Barometers, of which Difference, consumptive and asthmatick Patients, and those that have a clear shrill Voice (a Sign of a Consumption) must needs be very sensible.

The Lungs by their Action rarifying the Air, within the Vesicles, extend them too much, and by their too close Contact or lateral Pressure impede Respiration; or, in other Words, the Air in the Lungs being too much rarified takes up too much room, and in Consequence stretches the containing Air-vessels, by which they are so pressed against each other, that an Anhelation or Shortness of Breath comes on.

Too hot an Air dries up the *Fluid-containing* Vessels, especially the Lungs, dissipates the finer, and increases the grosser Particles

Particles of either kind of Fluid, whether ferous or sanguineous, causing Obstructions, Inflammations, and Disorders in the Blood and Nerves. *Extream Cold* contracts, closes, strengthens, and invigorates the Fibres, and causes them to bear harder, or act more forcibly upon the Fluids; thickens the Humours, and occasions Coughs, Catarrhs, and scorbutical Obstructions. *Great Moisture* relaxes the Fibres, increases the Serum, hinders Perspiration, and occasions Fluxes, Fevers, &c. and if joined with much Heat, Mortifications, Dropsies, Colds, &c.

The Pressure of the Air upon the Surface of our Bodies, is not less necessary to Health, than it is evident we suffer in it by a Change of Weather; when the Air, pressing more or less upon the Vessels, renders the Blood by that Means more or less compact, as it is crouded into a less, or expanded into a greater Space. The Difference of the Weight of Air at different Times is so considerable, and the Variations frequently so sudden, that it is wonderful we do not oftner suffer by such Vicissitudes and Fluctuations than we do.

The whole Weight of Air, which presses equally upon a Body of about 15 square Feet Superficies, (which is the most commonly supposed Computation of the Su-

perfcies of a Man's Body) when the Mercury in the Barometer is higheft, is calculated to be equal to 39,900 lb. and when loweft 35,918 lb. viz. about 3982 lb. Difference betwixt the leaft and greateft Prefsure*.

Now if the Air be over ponderous, its Prefsure on the Veffels, crouds the Fluids into them, and thereby checks and ftops the Circulation; if (on the contrary) it be too light (the Veffels and their Fluids too much expanding) it begets Tumours and Eruptions, Stagnations and pulmonary Humours, (efpecially Short-windednefs,) and Death. When the external Air is too light or too much rarified, it preffes lefs upon the Surface of the Body, in Confequence of which, the internal Air forces itfelf more violently into and expands the Veffels, and acts much in the fame manner as the Application of the *Cucurbitula*, or Cupping-glafs, which has before the Application all the Air taken out (or exhausted) by the rarefactive Power of Fire; then when it is put upon any Part of the Body, as it has in it no preffing Air, fo it alfo keeps off, from the Part it is applied to, all the Prefsure of the atmofpherical Air; and in Confequence gives room for the internal Air to force the Blood into the expanded capil-

* See *Chambers's Dictionary*. Atmosphere.
lary

lary Vessels, and thence into the Glasses, when applied after Scarification.

Moreover, the Air proves more or less salutary or noxious, according to the several Seasons, Regions and Situations; with respect to the Seas, and other flowing or standing Waters, Differences of Soil, higher or lower Grounds, Forrests and Meteors, and their various Exhalations mixing with it, and changing the Temperaments, of which the cold and moist Weather is the most penetrating, and most apt to introduce a Shivering and Chillness; the outward Fibres contracting, and the Fluids retiring from (as in a warmer Air they flow towards) the Superficies.

But whether this be brought about by the Air's bearing on the Surface, or by an Act of the diviner Particle, the *Anima Humana* within, contracting the Fibres of the Surface, and summoning the Fluids thence, from a Principle of Self-preservation, *sub judice lis est*.

The violent Commotions of the Air, and various Winds, have likewise different Effects, from their Velocities, and sundry Qualities, and the salubrious or the hurtful Steams with which they are impregnated and fraught; which must proportionably

tionably differ greatly, as it passes over a healthy or unhealthy Country, over a large Continent, or from off the Seas.

III. By *Meat* and *Drink*, the Waste of the Solids and Fluids is repaired, and its Parts frequently increased: These therefore ought to abound with Ingredients suitable to the Mixtures of the Body, which are chiefly mucilaginous, fat, earthy Substances, common with Animals and Vegetables.

Custom and Necessity have already (in the main) determined, what Sorts and Parts of these may serve for Meat and Drink, and it is the Physician's Province to advise, which of all and either of them is most conducive to Health, which must differ at different Times, as when they are designed to restore *lost*, or preserve *present* Health.

That Vegetables afford sufficient Nourishment, Millions of Men, living only upon Bread and Water, testify; as also the Strength and Vivacity of other Animals, from which we differ not in this Regard: And perhaps from some of these it is, that we have learned to dress our Corn, and render it more fit for Use, by fermenting it, as they do theirs in their
Crops,

tops, e'er they admit it to descend into their Stomachs.

Corn and Pulse are most in use; of these Rye and Wheat are best for *Bread*; Barley and Oats for *boiling*, as also Rice, Millet, &c.

The Pulse-kind are more hard and juiceless. Herbs, Roots, and some Fruits abound with Phlegm and Earth; and of course are apt to communicate a somewhat disagreeable Ferment and Sharpness to the Blood, and are therefore not fit for Food and medicinal Use, till after they have been gathered awhile, and laid sweating in a Heap, especially Apples, which should be first baked in Tarts, &c. before they are used as Food.

That the Flesh of Animals affords wholesome Food, is plain by Experience, and the Structure of the human Stomach; which is very similar to that of *carnivorous* Birds and Beasts, the Texture of whose Stomachs differs much from those adapted to digest Grain, Grass, &c.

The *Tartars*, *Samoids*, and their very Children, shew, that even *Carriou* and *raw Meat* will yield good Nourishment. Nature itself points out Milk, as the simplest, and most early, tho' not indeed the only Food; for otherwise the Use of Teeth

were quite superfluous, and it would seem as strange, that many Animals, as soon as they are furnished with but an imperfect Set, seek out a stronger Diet; at best Milk affords but a spongy kind of Flesh.

It is wonderful to see, how these young Animals select that kind of Food, peculiar to their Species!

The Aversion sick People discover to all Flesh Meat, is a convincing Proof, that Men may live without it; considering how sensible they are of it, and how slow the Appetite for Meat returns, which is far otherwise with Bread, &c. a Loathing whereof, AVICEN reckons a very bad Prognostic: His Words are, *Omnis inappetentia mala, panis autem pessima*, which a wrong Translation thus expresses; *Omnis oppletio mala, panis autem pessima*.

The Aversion which sick People have to Flesh Meat, seems very providentially designed, because it would certainly be very prejudicial, in as much as there is no Doubt, but that the Chyle formed of Flesh has a greater Tendency to Putrefaction, than that formed of Vegetables, which by their mild Acidity, or subacid Quality, prevent it, and in the main prove better Food,

¹ There is no such Word as *oppletio* to be found in the *Latin* Tongue.

Food, than that which abounds with saline sulphureous Particles, and (as some Flesh and Vegetables do) hastens on deadly Putrefactions, whereas saline Acidities are much more easily secreted or absorbed by testaceous Medicines; whence it appears, sweet Things are not so prejudicial as some imagine, nor even sourish and tart ones; such as Lemons, sharp Vinegar, Pepper, Aromatics, or sweetish oily Seeds, as Anise, Fennel, Juniper, &c. which produce Acidities and Fermentation, and are absolutely proper in seasoning Melons, Cabbage, Cucumbers, &c. to render the same wholesome.

The simpler Drink, as well as meat, is the better, not excepting even pure light Water, [*Aph. Lib. 5. Aph. 26. Hipp. Aqua quæ citò calefcit & citò frigescit levissima*] which (that it may not slip too hastily through the Body, by Secretion and Excretion) is qualified with more or less of nourishing and solid Particles infused therein, chiefly fermented or fermenting, called either Beer or Wine¹, &c. which are somewhat

Here it may not be amiss to observe, that Raisin Wine is best and cheapest, when made of candied and old Raisins; because as it is only the candied saccharine Parts, in which the Strength consists, so

what more suitable to the Mixtures of the Body; fermented Liquors are mostly heady, and when made with rawish or musty Hops, or too large a Quantity of Oats, prove intoxicating: As also some Wines of *Hungary, Germany, and France*, abounding with Chalk, either from the Nature of the Soil, or the vile Adulteration of Vintners. To drink any thing too hot is pernicious, [*HIPP. Aph. Lib. 5. Aph. 16. Calidum ubi quis, &c.*] nor is it right to use one's self to any one Sort of Food, or to be too timorous or scrupulous as to the Quality or Quantity, or Time of Eating. Moderation is the best Rule to be observed. [*HIP. Lib. 2. Aph. 4.*]

N. B. Eating too much is more prejudicial than too much Drinking.

The ill Consequences of overcharging the Stomach are many, and very pernicious, but those of too great Abstinence more desperate, according to HIPPOCRATES, *Aph. Lib. 1. 5. In tenui Victu egri Delinquant, &c.* In the first Case, the Stomach is too much extended, its Orifices closed,

in Consequence there is a greater Proportion of these Parts in 100 wt. of the dried, than in 100 wt. of the new and moist Raisins, of whose Moisture no Part has, as yet, been evaporated.

Lib. 2. Aph. 11. HIPP. Aph. 25. French Edit.

its

its Vessels compressed, and its chief Functions impeded; whence Shortness of Breath, Heart-burnings, Giddiness, Reachings, &c.

In the *Second*, the Solids are destroyed, the Fluids dissipated and thickened, the Salts sharpened, &c. whence stinking Breath, corrupt Saliva, Loathings, fainting Fits, extream Appetite, and want of it, Gripings, Choler, Watchings, Epilepsies, raging Fevers, (which may be called Fevers of Inanition ¹) and a Train of other Distempers ². There are arising from Quality Acrimonies of *four* Kinds.

First, Saline Acrimonies, which are either, 1st, Muriatic or Briny, causing Thirst, Hoarseness, Rigidity, sharp Serum, Colliquations, grievous Pains and the

¹ When they are the Consequence of so impoverished a State.

² It is observable, that a Woman's Milk, who has fasted for 12 Hours is bad, and sure to disagree with the Child; if she fast for 48 Hours, it is next to Poison. And it is very providential in such a Case, to see how immediately Nourishment (especially soft Ale) is conveyed to the Milk; and the Milk (tho' rendered bad by fasting) is, upon Occasion of this Recruit, immediately rectified, and becomes good Nourishment to the Child; especially if the Nurse empties her Breasts some Time before her clapping the Child to it; by which Means the Child will have no Part of the Milk which was spoiled by fasting. It is likewise very proper for a Nurse so to do, when she has been taking a long Walk, or using any violent Exercise.

Scurvy.

Scurvy. 2d, Simple Acids, joined with Harshness, apt. to astringe and coagulate, as is in unripe Fruit, creating cutting Pains, Heart-burnings, Agues, Scurvies. 3d, Keen Acids, as in Vinegar, productive of the same Evils as the last, and of the Gout and Rheumatism, if used in too great a Quantity.

Secondly, Aromatic Acrimonies, made up of saline oily Sharpnesses, causing Dryness, Burnings, quick Circulations, Wasteings, Contractions, Fevers, &c.

Thirdly, Spirituous Acrimonies, fermented and distilled, as strong Wine, Beer, Brandy, &c. apt to dry and contract the Fibres, strongly to coagulate the Humours, readily elevating, and as soon deadening the Spirits, as Oil does the Fire, necessitating Cravings after more and stronger, and begetting Vapours, Tumours, Consumptions, Fevers, Paleness, Dropsies, &c.

Fourthly, Fermenting and penetrating Acrimonies; as, 1st, New Wine, and other Drink, stopt up before it has done working, causing Winds, Cholics, Loosenesses of all Kinds, Vomitings, &c. [*Quatuor ex vento veniunt in ventre retento. Spasmus, Hydrops, Colica, & Vertigo, hoc res probat ipsa.* HILDANUS, fol. 641.] 2d, Vicissi-

Vicissitudes abounding in our Nourishment, prepared of Flour unleavened, and of such Parts of Animals as most abound with Jelly, as also Curds and Cheese, tough, hard, &c. which load the Stomach with raw Crudities, obstruct the Intestines, beget thick viscid Blood, and by obstructing the Glands cause Paleness, Chillness, Slothfulness, &c. All great Coolers have the same Effect, especially on those that use but little Exercise. 3d, Oily Food, taken to Access, too much relaxes the Solids, obstructs the smaller Vessels, keeps out the aqueous Fluids, and depraves the Mixture of all the Humours, exciting sharp and burning ones, with Belching, Choler, an excessive Thirst, Obstructions, Indigestions, Inflammations, &c.

IV. Motion and Rest, must alternately relieve each other for the Support of Health². The Apostle's Injunction, *That he who will not work, neither shall he eat*³, is what Nature also teaches us to observe, at least in Reference to plentiful Meals, and good substantial Food. Moderate Exercise furthers an equal Distribution of the Fluids, and

² Quod caret alterna requie durabile non est. HILDANUS, 639.

³ 2 Epist. Thess. c. iii. v. 10.

the straining and refining of them for their several Uses, together with Improvements of the whole in all their Functions, which Sloth destroys. Voluntary Motions ought to imitate Nature's wise Oeconomy, which conducts every Thing smooth and gently, with great Tranquillity and Moderation. Violent, unequal and excessive Motion heats the Blood too fast. The just Proportion of it must be suited to the Strength and Temperament of the Body; for the slender, the light and active better bear it, than others of a fat and tender Constitution, to whom it is in like manner necessary, but to be used with greater Circumspection. Passive Exercise is to be preferred to strong active Exercise in most Constitutions.

The Continuation of Exercise, to some Degree of Lassitude and Weariness, is of great Importance, the want of which will frustrate its Design, by not affecting equally the whole Body.

Among the various kinds of exercising the Body, there are Walking, Climbing, Pushing, Wrestling, Running, Cleaving, Sawing, Ringing, striking the Ball, Bowling, Tennis, Cricket, Riding, &c. which last Dr. Sydenham particularly recommends to all consumptive Persons. *Leipfic Edit.* 524.

of

of SYD. Works. *Hoc tamen Sanitè assero, quòd neque Mercurius in lue Venereâ neque cortex Peruvianus in inter mittentibus Efficaciores extent, quam in Phtbisi curandâ Exercitium jam Laudatum.*

The sober Use of *Motus* and *Potus* for stirring and thinning of the Blood, contributes much to the preserving and restoring Health. Excessive muscular Motion wears the Solids, sublimes and dissipates the thinner, thickens the grosser Fluids, and wastes the Marrow, whence proceeds Inflammations, Fevers, Bleedings, Gangrenes, &c. especially when there is an ill Mixture of Humours, and Decay in any Part before-hand.

Rest ought gradually to succeed to Motion, so that a slower Motion must follow on a quicker, lest a sudden Change from Motion to Rest should occasion an unequal Distribution, and in Consequence Shiverings, Pains in the Limbs, and Settling in the Fluids; and no Person should sit down to a plentiful Meal immediately after hard Exercise, or go to Bed + upon a full Stomach, tho' a small Morsel may be proper.

* *Ut sis nocte levis, sit tibi cœna brevis.*

Post pastum stabis, passu molli meabis.

HILDANUS.

Too

Too much Rest, and the want of exercising the Muscles ⁴ of any Part, or the whole Body, unfits them for Use, and induces a Sluggishness all over, together with a Load of humorous Fat and Marrow, Drowsiness and Colds.

V. Watching employs our Senses, and thinking Faculties, as Motion does the other Members, so that Sleep is to those the same as Rest is to these, equally necessary, and to be proportioned with great Care and Moderation. Great Fears, Sorrows and Solitudes disturb and prevent Sleep, so does Eating just before Bedtime ^{5 6}; but when the Mind is easy and secure, listless and indifferent, void of attentive Thoughts, and tired with, or disrelishes its Objects, it invites to Sleep, which seems to be a Cessation of that Alacrity of Mind, in thinking and perceiving, which is usually called *Pervigilia*, i. e. Vigilance or Watching. This is observed in Persons who sleep at Church,

⁴ BLANCHARD. *Institut. Medicin.* p. 245. 4to.

⁵ Si nocturna tibi noceat potatio vini,

Hoc tu manè bibas iterum, & fuerit Medicina.

HILDANUS, 410.

⁶ Post Laborem quies, post quietem Cibum, post Cibum Somnus post Somnum Venus. *Ibid.*

when

when they don't like the Sermon, or the Parson.

Wherefore as the Sluggish and Heedless are always drowsy, the Lively and Ingenious are so too (tho' from different Causes) and cannot well refrain from Sleep, when the Matter and Object do not suit their Inclinations. To fall asleep, and awake again at one set Time, depends on Custom, and a vigorous Resolution : Different Ages and Complexions must measure the Allowances of either : For of Youth the Phlegmatic and Sanguine require more Sleep than others of a different Constitution ; as likewise do the Melancholy, and the Choleric, of those who are well stricken and advanced in Years 7.

Drunkenness and sleepy Potions, do not answer all the Ends of natural Rest, seeing they relieve not, but rather divert and employ another Way the Activity of the Mind : Whence that Weariness after such kind of Sleep, if not of the moving Fibres of the Members (to which there is indeed a sort of Relaxation ?) yet in the thinking Faculties, because in them there is not that Cessation from Cares as there should be, as may be fairly gathered and

⁷ Jeune qui vielle vieux qui dort approche tous deux a la mort.

inferred from those various Dreams, and those strong lively Visions attending such a Sleep.

Watching is toilsom and fatigues, whilst Sleep recruits the animal Fabric; in which, by natural Order, there must be Successions of each to each.

That Sleep, and the Chilliness we feel resulting from it, on a full Stomach, clearly shew, that the Mind is too much taken up with the Work of Digestion, to determine the animal Spirits to the Organs of Motion; which is in a far greater Degree the Case likewise in Epilepsies and Distractions, swooning Fits, Tetanus's and Catalepsis, and an entire Insensibility in Fevers, &c. when the Mind is in too great a Hurry for determining the Spirits, to the Externals, in any Shape, or in due Order; she being at such Times very intent upon removing immediately some dangerous Affliction or Disorder in the *Vitals*.

Too much Watching preys upon the Spirits and the Solids, especially the Brain; increases sharp Humours, Choler, Sadness, Fevers, and Deliriums. Too much Sleep (wasting the Volatile, and gradually of Course thickening the other Fluids,) loads the Brain and Head, and stupifies the Senses, with that Train of Mischiefs
which

Which attend, and is most hurtful to those who are inclinable to too much Rest. For, as,

Quod caret alternâ requie durabile non est;

So,

*Plus vigilia semper, nec somno debitus esto :
Nam diuturna quies vitiis alimenta ministrat.*

VI. Excretion is that Separation of an animal Substance, which rejects somewhat out of the Body, as of no farther Use. For seeing our Bodies stand in Need of continual fresh Supplies, and those Solids and Fluids, which are taken in for that Purpose, contain many Parts unfit for Nourishment; so they would prove noxious to it, if retained, and not removed in Time by Excretion: On the contrary, from admitting these Excretions to exceed their Bounds, many pernicious Consequences may ensue, viz.

An excessive Excretion of the Saliva by Spitting hinders Digestion, causes Thirst, Choler, and Wasting; but a defective Excretion of it, or rather Secretion in the salivary Glands, impedes the tasting, chewing, swallowing and digesting our Food.

Too great a Discharge of the Gall injures the Chyle, Concoction, and the Separation

of the Fæces begets Acidities, Chillness, Debility and Swoonings; but if obstructed, it brings on the Yellow Jaundice.

If the Pancreatic Lymph flows too much, it has the same direful Effects as the Saliva, and over and besides occasions Loosenesses with their Attendants, Hæctic Fevers, &c. but if it flows too sparingly, it causes hard Swellings, and Stoppages in the Bowels, Costiveness, Gripes, Twisting of the Guts, Fevers, &c.

Too much Loss of Blood destroys the Spirits, and increases Crudities, with their sad Consequences. The want of the usual Evacuations of the Blood (such as the *Menses* in Women, a Nasal or Hæmorrhoidal Flux in Men, which never suddenly stop without Danger) produces Inflammations, Fevers, and innumerable other Distempers. Not to mention various other Maladies, which are also created by too great an Excretion of Urine, as the *Diabetes*, or too copious a Perspiration, as the Sweating Sickness, or the want of either; for in Persons liable to moist Feet or Hands, if the Sweating suddenly stops, Illness follows.

Besides these Six Non-Naturals, which are often the Occasions or external Causes of Distempers, there are some other Causes
or

or Occasions of them, not outward but internal : And these are what Physicians call,

I. A *Pletbora*, when the Vessels are replete with Humours, more than are agreeable to a natural State of Health; and this arises either from a Diminution of some natural Evacuations, or from Debauch, and feeding higher, or taking more in Quantity than the ordinary Powers of the *Viscera* can digest and secern. Evacuation and Exercise are its Remedies. *Contraria Contrariis medentur.* HIP.

II. A *Cacochymy*, when the Constitution abounds with vitiated Juices, or some ill Humours in the Blood, either ulcerous, bilious, pituitous, melancholic, acid, salt, sharp, saline or sulphureous, scorbutic or scrophelous.

III. *Heterogeneous* Matters, when any Thing of disproportionate or different Sortment is mixed with the Blood and Spirits, or lodged in the Intestines, as in Fevers, (pestilential ones especially) Swimmings in the Head, explosive Motions, Twitchings, and the Apoplexy; as also the Eggs of Insects, taken in by the Air, or Drink, lodging and breeding Worms within the human Body.



THE
C A S E
O F

S. B. a MAID SERVANT,

I Was sent for to attend her *December 5,*
1750.

She had a sudden Stoppage of her *Menses*, attended with Light-headedness, and a very high Fever of the inflammatory kind; she complained of a violent Pain in her Back; her Eyes looked wild; she spoke quick, and had a *Subsultus Tendinum* in her Hands.

N. B. About a Fortnight before, she (as I was informed) having had a Fever, ventur'd out too soon; so that I took this to be in some Measure a Relapse, and not owing only to the first Complaint, (*i. e.* the *Menses* stopping) because they had been upon her three Days, and consequently the

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the Revulsion or Regurgitation of the menstrual Blood (as I apprehend) could not have either Virulence or Force enough to have occasioned this Illness.

The Method I proceeded in (after having told the Family what imminent Danger I thought she was in) was as follows;

December 6, Morning. *Statim applicetur Emplas. Vesicat. Dors.*

And let her drink plentifully of Barley-water, with Hartshorn Drops, N^o. xx. in each Draught.

At Night. *Tollatur à Brach. Sang. ℥viij. & Pergat in Ufu, Aquæ Hordei, cum Spt. C. C.* which I allowed, because they did not care for Expence.

Eleven o'Clock the same Night. Found her worse, and ordered the following Medicines.

R. Lapid. Contray. gr. xxv. Spir. C. C. per se gutt. xx. Pul. à Myrrb. C. ℥ss. Aq. Alex. Sim. ℥iss. Spir. ℥ss. ft. Haust. sextâ quâque horâ sumend.

She was very delirious all Night, by the Nurse's Account, but had some Sleep towards Morning, and did not appear to me (when I went to her in the Morning of the seventh Day) to have any convulsive Catches at all as before.

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Seventh Day. I found her more sensible, and free from the Pains in her Head, Back, and Bones: Her Pulse pretty low, her Flesh cooler, and she seemed to me better in all Respects: She had had, in that Day and Night, five Stools in all: I ordered her Rice Gruel instead of Barley Water, and also gave her Leave to eat some boiled Rice. Then I ordered the following Medicine.

Rx. Aq. Mentb. piperit. ℥viij. Epidem. ℥ij. Confect. Card. ℥ij. Sal. C. C. ℥ss. Syr. Caryoph. ℥ij. Fiat mixtura cujus capiat, Coch. iiij. sexta quâque horâ.

Ry. Aq. Cinn. ten ℥vi. Confect. Fracast ℥iiij. Syr. Nucis Moschat. ℥i. Capiat, Coch. iiij. pro re natâ.

She had no Stools that Night, slept the Forepart of it, but was restless all the other Part, yet pretty sensible.

Friday Morning, the Eighth. Found her sensible, but rather warmer than the Night before.

At Noon. She had had some Sleep, and was seemingly better.

Evening. Her Cough troublesome, complain'd of a Pain under her left Breast: The Water she had made appeared with a Cloudiness,

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Cloudiness, not high coloured, and the Fever (as I thought) was then at its Crisis; and more so than it was before or after, by the Appearance of the Water. I then ordered for her;

R. Sperm Cet. ℥ij. Sach, puriss. gr. xv. Syr. Balf. q. s. ft. Bol. statim, & sexta quâque Horâ sumend. superbibendo Coch. iij. Mist. Sequent,

R. Aq. Lact. Menthæ. ana ℥iiiss. Pæon, C. ℥iss. Syr. Croci ℥ij. Sperm. Cet. per ov. Solut. ℥ij. Tæ. Thebaic. gutt. vij. Capiat. ut supra.

Sit in promptu. Spt. Vol. Arom. Lavendul. C. ana ℥iss. Capiat. gutt. xx. in Linguoribus.

Applicetur Vesicat. Brach. sinist. statim.

Saturday Morning, the Ninth. Every way better, as to Rest, Pain, Urine, Breath, and Senses; no more Stools; ordered her then as follows:

Purgat in Ufu Bol. novissim. Prescript. & Misturæ addetur Salis Absynth. ℥ss. Succ. Limon ℥vi. Capiat. ut ante.

Sunday Morning, the Tenth. Not much better, but endeavoured to shew herself better than she was; I ordered for this

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this Day only a Repetition of the last Medicines.

N. B. She almost always denied the Account I had from the Nurse, but more especially about her Pains.

Afternoon. Worse.

Night. Very low Pulse, otherwise much the same, except that she coughed pretty much, of hard and bad tasted Spittle.

Monday Morning, the 11th. Nurse said she had been very delirious in the Night; her Urine was turned pale again. I ordered for her as follows:

R. Pulv. è ♂ C. Sper. Cex. ana ℥i.
Castor. Rafs. gr. vi. Syr. Croci q. s. ft.
Bol.

Sextâ quâque horâ sumend. cum Coch. iv.
Misturæ heri prescript. cui addantur
Tincturæ Castorei ℥ij. Salis Succini,
gr. xv.

R. Decoct. Pectoral. ℥xij. Oxymel. Scil-
lit. ℥iss. Tinct. Croci ℥ss. Aq. The-
riacæ ℥iss. ft. Apozem. Cujus capiat.
Coch. iij. Subindè præcipue urg. tussi.

Applicentur Epispast. altern. Brach. eti-
amque Suris si supervenerit Delirium.

Tuesday Morning, the 12th. Very little Sleep in the Night. Raved very much, but

but would take no Medicines, alledging the Nurse had an Intent to poison her: Her Water turned pale again. I prevailed on her while I was there to take one of her Bolusses, which from me she was always ready to do. She then appeared so bad, I feared nothing was to be done; and did suppose she could not live many Hours, her Eyes turning inwards in a very ghastly manner; yet I tried this further Means for her Assistance.

R. Rad. Valer. Syl. gr. xv. Contrayer. gr. x. ft. Bol. cum quolibet Syr. Sextâ quaque horâ sumend. superbibend. Coch. iij. mist. sequentis.

R. Aq. Lactis Menthae ℥iijss. Pæon C. ℥iss. Syr. Croci ℥ij. Sper. Cet. Vitell. ov. Solut. ℥ij. Tæ. Thebaic. gutt. vij. Tæ. Cast. Russ. ℥ij. Capiat. ut supra.

Applicetur Emplas. Vesicat. & Cephal. p. œ. Plant. Pedum.

That Night I called in Dr. —, and we ordered the following Draught, viz.

R. Aq. Cinnam. Ten. ℥iss. Pæon. ℥ss. Theriac. Androm. ℥i. Camphoræ gr. iij. fiat Haust. horâ somni sumend. & Per- gat in usu manè præscript.

Appli-

*Applicetur Vesicat. Regioni Costarum Lat.
affect.*

Wednesday Noon, the 13th. She had had a better Night; Pulse much the same, and there was an Appearance of some miliar Eruptions, as the Apothecary's Servant left Word, but we could find none (tho' here it may be noted, that they often appear at Night, and in the Morning disappear :) She slept, greatly disturbed; no Stool, Breath very short, but complained of no Pain or Strangury. We jointly ordered for that Day only a Repetition of the Bolusses, and Julep I ordered, and the Camphire Draught which we ordered together.

Thursday Morning, the 14th. When I saw her, I found her to have no Fever, nor any other very bad Symptom; but yet very odd in her Head, talking irrationally, after I had sat by her for a little while; tho' she answered pertinently enough as to the Questions I asked her about her State.

Her Tongue was foulish, her Water still pale and crude, but with something of a Sediment: She had no Stools; slept tolerably, and took her Things regularly, which I ordered her to go on with, and to
get

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get her Head shaved, in order for a Cephalic Plaister to be applied.

Tuesday Morning, the 15th. Dr. — and I ordered jointly for her, viz.

Applicentur Hirudines Temporibus ut fluat sanguis ad ℥iv.

℞. Camphoræ gr. viij. Aq. Alex. ℥iss. Confect. Cardiac. gr. xv. Tæ. Theb. gutt. viij.

Et renoventur Emplast. Cephal. & Episp. Plantis Pedum ante præscript.

Saturday, the 16th. *Pergat in usu omnium novissimè præscriptorum. Et manè diluculo, Diei Sabbati Capiat. Haust. Sequent. viz.*

℞. Pulv. Hellebor. nigri ℥i. Sal. C. C. gr. v. Syr. è Spin. Cerv. ℥ij. Aq. Petrosel ℥iss. m. ft. Haust.

This I was a little afraid would be too strong; so I called at Night, and finding (with Mr. — the Apothecary) a plain Appearance of some milliary Eruptions, and more threatening, postponed this Purge, and ordered the following Mixture to be taken in the room of it, by Spoonfuls every six Hours.

℞. Con-

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*R. Confect. Cardiac. ℥iij. Aq. Alex.
Simp. ℥iv. Mentha Spirit. ℥ifs. Syr.
Cyr. Croci. ℥fs.*

Sunday Evening, the 17th. Ordered a Repetition.

Monday Evening. Ordered a Repetition. She being better in all Respects, and very sensible.

*Tuesday. Ordered nothing, because the Family were quite impatient to get rid of the Trouble, and, as they thought, the Expence likewise, though they had Advice and Medicines for nothing. So upon Wednesday the 20th of December, I procured her a Bed in the Hospital, having, before she went in, pronounced her in a manner well. She was there under the Care of Dr. Pitcairn, who ordered her a Bolus of Myrrh and Wormwood, and an oily Medicine, *pro re natâ*, and a Cordial Julep every six Hours; and after this tedious Process, she is now, and has ever since been, quite well.*

I take this Disorder to have been an inflammatory and a nervous Fever joined together; in which Case, I apprehend, the nervous Affections are to be first regarded; and if (as I believe in this Case happened) an additional Heat be superinduced by
strong

strong Cardiac and Alexipharmic Medicines, it would be easier to reduce that by *Antiphlogistics* and *Vena-section*, than it would be to cure the nervous detrimental Symptoms, whose Increase had been brought on by only regarding them in a secondary Way. But I may not be right in my Conjecture in general, from that want of Judgment and Experience which others have.

N. B. Upon her first Seizure, her Mistress told me, that she had twice given to her half a Pint of *Penny-royal* Tea, with a Glass of Gin in each; and when I first saw her, I really could not tell, whether it was a *Delirium*, or the Effect of the strong Liquor, for she seemed to me then intoxicated: But as I found her the same on my second Visit, I concluded her to be delirious; tho' rather Comatose than Raving.

She was very poor, and had no Friends: Her Mistress had no other Woman-servant, nor had she any Place in her House but a Garret for her to lay in, in which there was no Possibility of having a Fire made. There was about the fifth Day of the Disease (from outward Appearances, such as Pains in her Side, and about the
Scrobi-

80 *The CASE of S. B.*

Scrobiculum Cordis; and a great Cough)
great Reason to think it would end in a
Pulmonary Pthifis.

On the first Sunday after the Seizure,
(which was on Tuesday Night) I advised
Cupping; but her Mistress (through Fear)
dissuaded me: She had then a great Pain
in the Shoulder-bone.

F I N I S.

E R R A T A.

Page 21. Note, Line 1. dele *especially when putrid.*
P. 27. Note, l. 4. for *apprend* r. *apprehend.* P. 41.
l. 19. for *is* r. *passes.* P. 46. l. 30. for *whilst it seizes*
r. *yet he adds in.* P. 72. l. 3. for *Archigenus* r. *Archigenes.*
P. 91. l. 8. after *i. e. r. Pulp of Cassia.* P. 125. l. last,
for *Puleg.* r. *Aq. Puleg.*

Midwifry, P. 5. Note, l. 2. for *gravidatate* r. *graviditate.* P. 32. l. 4. r. *does in Utero.* Ibid. l. 14.
dele *in Utero.* P. 41. l. 29. for *Smellie's* r. *Smellie.*